Patent Claims

1. A device for storing plate-shaped substrates, particularly wafers or test wafers, as they occur, above all, in the manufacture of electronic components, whereby the device

- has a plurality of consecutive storage elements in a stacked direction, each of which is provided for accommodating at least one substrate,

- each of the storage elements is provided with means for depositing the substrate, and

- the storage elements have a stacking area, which is provided for arranging the respective storage element within a stack of storage elements.

2. A device in accordance with claim 1, characterized in that the storage elements can be stacked directly on one another.

3. A device in accordance with claim 1 or 2, characterized in that the storage elements can be handled at their stacking area for producing an increased distance between two consecutive storage elements, as a result of which one of the storage elements is accessible for a deposit or a removal of a substrate.

4. A device in accordance with at least one of the above claims, characterized in that a relative motion can be carried out between the two storage elements for producing an increased distance.

5. A device in accordance with at least one of the above claims, characterized in that the storage elements are embodied as at least approximately self-contained storage rings.

6. A device in accordance with at least one of the above claims, characterized in that the means for depositing are embodied as inwardly and upwardly directed projections, by means of which a substrate can be deposited above a ring section of the storage element.

7. A device in accordance with claim 6, characterized in that the projections have a horizontally directed contact surface.

8. A device in accordance with at least one of the above claims, characterized in that storage elements arranged on top of one another form an at least laterally, preferably completely, enclosed space.

9. A device in accordance with claim 8, characterized by means for producing clean air, with which a clean room atmosphere can be produced in the enclosed space.

10. A device in accordance with claim 9, characterized in that an overpressure can be produced in the interior of the device with the clean room means.

11. A device in accordance with claim 8 or 9, characterized by means for a predetermined discharge of a gas from within the device outwards.

12. A device in accordance with at least one of the above claims, characterized by means for

increasing stability and/or positioning accuracy of superimposed storage elements.

13. A device in accordance with claim 12, characterized by at least one centering means formed on one of the storage elements, which centering means cooperates with a centering means of a consecutive storage element in the stacked direction for increasing the stability.

14. A device in accordance with at least one of the above claims, characterized by a tool for producing a relative motion between storage elements, which [tool] is provided with a first contact surface for contacting an upper storage element and a second contact surface for contacting a lower storage element, whereby motion means are provided, with which a relative motion can be carried out between at least one of the storage elements and at least one of the contact surfaces, in order to increase the distance between the storage elements.

15. A device in accordance with claim 14, characterized in that the two contact surfaces of the tool are offset against one another in the stacked direction of the storage elements.

16. A device in accordance with one or both of the above claims 14 and 15, characterized by a relative mobility of the two contact surfaces.

17. A device in accordance with at least one of the above claims, characterized in that the tool is movable in a plane parallel to surfaces of the disk-shaped substrates.

18. A transport container for transporting substrates in a lockable space, whereby the transport

container has storage elements, on each of which a substrate can be arranged, characterized by a device in accordance with at least one of the above claims 1 through 13.

19. A method for handling a disk-shaped substrate, particularly a wafer, as it is provided for the manufacture of semiconductor components, whereby, for approaching a tool, which has two contact surfaces, to a specific storage element within a stack of separatable storage elements, a first relative motion is carried out, the specific storage element is contacted with the first contact surface and an adjacent storage element is contacted with the second contact surface, then a second relative motion is carried out, by means of which the distance between the two storage elements in the stacked direction is increased by means of the tool.